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M·A·P·S *Digest*

Official Publication of
Mid-America Paleontology Society

Summer, 1984

MAPS SPECIAL MEETING

The special meeting of the members of Mid-America Paleontology Society was held at the Union at Western Illinois University, Macomb, Illinois at 7:30 PM on April 14, 1984, pursuant to a Resolution of the Board of Directors and Executive Board passed on February 4, 1984. A notice was mailed to all members twenty three days before the meetings and 117 of the 502 voting members were present. Margaret Wallace (President) presided over the meeting and Mayr Wells acted as Secretary. Margaret Wallace declared a quorum was present since more than 15 members of the Corporation were present either in person or by proxy, as required by the By-Laws.

The restated Articles of Incorporation as adopted by the Board of Directors and Executive Board at their meeting held on February 4, 1984, were presented to the members of the Corporation present at the meeting and opened for discussion. After discussion of the restated Articles of Incorporation in which no changes, amendments or substitutions were offered, the discussion was closed and a ballot was taken with the following results:

(see page 2)

MARK YOUR CALENDARS

- 30 June - MAPS Field Trip -- Monmouth & Biggs-ville. Meet at 9:00 a.m. See page 2 for details.
- 5 July - Midwest Federation Show -- Milwaukee
8 Wisconsin
- 12 July - California Federation Show -- San
15 Diego
- 2 Aug -- Northwest Federation Show -- Anchorage
5 Alaska
- 4 Aug -- MAPS Field Trip -- Canton/Farmington
Meet at 8:30 a.m. See page 3.
- 10 Aug -- Eastern Federation Show -- Tidewater
12 Beach, Virginia
- 1 Sept - MAPS Field Trip -- Humboldt, Iowa
2 Meet at 9:00 a.m. See page 3.
- Oct -- MAPS Field Trip -- HELP! Iowa/Illinois/Wisconsin--contact Don Good

EXPO VII 1985 -- April 19, 29, 21

EXPO VIII 1986 -- April 11, 12, 13

IT'S NOT TOO EARLY TO BEGIN TO DREAM!

MAPS SPECIAL MEETING, Cont'd.

- 1) Members voting to adopt the Restated Articles of Incorporation as submitted, 117.
- 2) Members voting against adopting the Restated Articles of Incorporation as submitted, 0.
- 3) Abstentions, 0.
- 4) Other, 0.

More than two thirds of all members being present having voted to adopt the Restated Articles of Incorporation as submitted by the Board of Directors and Executive Board the Restated Articles of Incorporation were so Adopted

The next order of business was the Amended By-Laws and Constitution of Mid-America Paleontology Society as submitted by Resolution of the Board of Directors and Executive Board, discussion was opened to all members of the Corporation present. Gilbert Norris proposed a Resolution for changing 3 items in the Proposed By-Laws and Constitution.

- 1) In the Constitution, Article 3, Section 1, the sentence "It may act on any business not involving the expenditure of over \$100.00," Gil proposed that the sentence be deleted as most of our expenditures are more than \$100.00 due to the increase in membership during the last few years.
- 2) In the Constitution, Article 6, Section 1, which states "There shall be standing committees as appointed by the Board," Gil proposed that the complete Article be deleted. Provision for the President to appoint standing committees is already stated in Article 2, Section 1 of the By-Laws.
- 3) In the By-Laws, Article 4, Section 2, the sentence "It shall also obtain club insurance if necessary," Gil proposed that the sentence be deleted. The membership covers such a large area that insurance for a few people on a field trip would not be fair to the rest of the membership.

It was moved and seconded that the 3 changes as submitted be accepted. Vote was taken on each of proposed changes and each were unanimously accepted by all members present. No other changes, amendments or substitutions were offered so discussion was closed and a ballot was taken with the following results:

- 1) Members voting to adopt the Amended By-Laws and Constitution as submitted including the 3 changes, 117.
- 2) Members voting against adopting the Amended By-Laws and Constitution as submitted including the three changes, 0.
- 3) Abstentions, 0.
- 4) Other, 0.

A quorum being present, and more than a majority of the members being present voting to adopt the Amended By-Laws and Constitution as submitted by the Board of Directors and Executive Board after deleting the 3 items submitted by Gilbert Norris, they were so adopted.

On motion the meeting was adjourned.

Respectfully submitted
Mary Wells, Secretary

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FIELD TRIP INFORMATION -- SUMMER, 1984

Nearly all quarries and mines require HARD HATS and SAFETY GLASSES. Come adequately prepared. Also, expect to sign a liability release form. It is suggested that food for lunch be carried with you. Time may be better spent hunting a fossil than waiting to be served food in a restaurant.

30 June -- Meet at 9:00 at the parking lot of Melings Restaurant, Jct. 67 & 34 in Monmouth (north side of town). We will be collecting from area quarries containing Mississippian Period Burlington material. Fossils to be found include: crinoids, blastoids, bryozoans, corals, brachiopods, and shark teeth.

Area Motels: Both near the meeting site.

Melings: 309-734-2196 Highland: 309-734-5125
Overnight camping at west edge of Monmouth
just south of Jct. 34 and 164.

4 August -- Meet at 8:30 at McDonalds on
north Main St. (Hwy 78 N)
in Canton, Illinois. We will
collect from area coal mines con-
taining Pennsylvanian Period/Carbondale FM
material. Fossils to be found include:
brachs, cephalopods, gastropods, etc. Excel-
lent hunting is expected. Our host for this
trip will be MAPS member Larry Johnson from
Canton, Illinois, 309-647-3405

Area Motels -- both located on west edge of
Canton (Hwy 9) -- Hilltop Motor Inn: 309-
647-71111 and Motel Siesta: 309-647-1915.

1 - 2 September -- Meet at 9:00 both morn-
ings at the HyVee Grocery
parking lot in Humboldt,
Iowa. We will collect in
area quarries around Humboldt (Saturday) in
Mississippian Period material noted for its
large gastropods and microfossils. There is
also interesting coral found here. Uncertain
about the site on Sunday at this time. If
you are coming on Sunday only, you should
contact Don Good (309-582-5232) during August
for particulars. Also, I live so far from
this area, if anyone can assist me in deter-
mining other good sites in the area, arrange
permission to collect there. I would great-
ly appreciate it.

Area Motels in Humboldt: Beacon Motel: 515-
332-3545 -- 812 13th St. No.
Corner Inn Motel: 515-332-1672 -- Jct 169 &
3. Camping: Beeds Lake at Hampton is nice,
but about 50 miles east of Humboldt.

October -- Can anyone assist me with plans
in the Iowa/Illinois/Wisconsin
tri-state area?

Field Trip Chairman -- Don Good
410 N.W. 3rd St.
Aledo, IL 61231
309-582-5232

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FIELD TRIP TO EUROPE -- DREAM OR REALITY?

The Munich Mineral Show, 1985, is November
1 - 3.

From a letter to Gil Norris here are some
thoughts:

10 days in Germany for a fossil-trip to end
at the Munich Show would begin October 24th.
Collecting would include:
Holzmaden -- Upper - lower Jurassic
Schuhofen/Gelstatt -- upper Jurassic
Mistelgau/Sayreuth -- Upper - lower Jurassic
Reumarkt/Gherplabz -- Upper Jurassic
Untersturwig -- Middle - lower Jurassic
Rondliuger Ries -- (American astronauts vis-
ited before moon landing)

(Ed comment -- Jurgen, HELP! I even got out
the World Book and tried to find the places.
Forgive the translating--I simply do not
know of these places and I am certain my
attempts will cause many smiles. no frowns,
please.)

Group to arrive at Stuttgart airport.
Stay in good and comfortable hotels.
All roomes with bathroom and good meals.
Approximate cost for breakfast, dinner,
spending the night from \$520 to \$670.
One bed rooms or two bed rooms.
Excursion program with descriptions of the
places listed and pictures of the fossils.
Minimum number of 15 persons.
Cost less with more people.
Besides fossil locations would also visit
museums.

More on this later but if it sounds as if
you might be interested, contact Gil Norris
If there is enough response, Gil can con-
tinue checking for more information.

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SEDIMENTARY NOTES

LINDSAY & MARCELLA BERRY, Queensland, Aus-
tralia -- Congratulations on the DIGEST
and the MAPS Society. We have been very
pleased to be members for the past 2 years and
look forward to receiving many more DIGESTS.

We had our first visitors from your country
very recently Emmette and Virginia Wallace of
Texas who are also members of MAPS. Need-
less to say both of our collections gained
and we are glad that they had a very enjoyable
tour of Australia.

FREDERICK J. COLLIER, Smithsonian -- ...I
hope the lecture was satisfactory and that an
exhibit of some other kind will be possible
in the future. I don't believe I have ever
met a more enthusiastic group of collectors
anywhere so it is a pleasure just to meet and
chat with them. The collections displayed

were very good and the pride the owners took in them was wonderful and well justified.

MAPS certainly appears to be an exceptionally well organized and active society.

...Thank you again for your generous words about the Burgess Exhibit. Should any MAPS members be in the Washington area I would welcome them at the Department of Paleobiology for a brief look at the National Collection.

(Dr. Collier has indicated he not only would join MAPS but would write an article on the importance of types and attitudes concerning them.)

HILDA MALONEY, California --There is a chance that Tom and I will be at the next EXPO.

I've been trying to get Rozaline Johnson (Napa) to come over here to see my museum. Thought she might offer some constructive criticism. I've had the Fossils for Fun group who seemed to enjoy it. One of the members is bringing her Gem & Mineral Club from Woodland to see it. Also have had several school classes.

In about 40 days Tom and I will be starting for British Columbia and the Yukon. (Ed. comment--they find vertebrate bones)

(Hilda's museum must be fascinating. Plan a side trip if you are in northern California. Hilda's fossils are extraordinary!)

BOB AND BETH CARLSON, Oregon -- My intention to write, immediately upon receipt of the 1984 Membership Directory, and the MAPS Digest, Volume 7, No. 4 failed in execution (I understand, Bob!). Though late, let me express my admiration for the tremendous effort, by yourself and those who may have assisted, in producing the excellent DIGEST dedicated to the memory of Harrell Strimple, and the easy to use new Membership Directory.

Then Volume 7, Number 5 MAPS DIGEST: I tore out what little hair remains on my head. Don Good's comments about the 30 new specimens he acquired at EXPO VI including trilobites; turning the page I read with dismay (because I couldn't be there) about the May Cincinnati field trip for trilobites!! Beth and I hope it was a successful dig for all who attended.

If you know of a member who may have an extra

trilobite or two from that dig and who may be willing to sell same, I'd appreciate knowing so that I could contact him/her.

(Bob, you might also contact Dan Cooper, 5732 Lake Huron, Fairfield, OH 45014. Maybe you'll make EXPO VII--it'll be just GRAND!)

DR. WERNER MAIDORN, Luxembourg --I have made several valuable contacts through MAPS with Echinoid fans in the US with whom I swap information and specimens. I enjoy reading your DIGEST, even if I have no chance to participate in your activities or collect in the same strata and faunas. If the exchange rate improves somewhat for us, I might even visit a future MAPS EXPO.

((You will be most welcome, Werner. Hope you can make an EXPO. Many more successful contacts we hope you make. It is good you like the DIGEST.))

RICHARD D. HAMELL, Dept. of Geosciences, Monroe Community College, 1000 East Henrietta RD Rochester, NY 14623-5780 --In the month of June next year (1985) I am planning a 14 day field trip for the Geology Club at MCC. The tentative itinerary is to proceed directly to the western-most post, that being Devil's Tower Wyoming. The corridor of travel will be I-90 & I-80 (NY - Chicago), I-80 (Chicago - Omaha, NE), and I-90 to Devil's Tower). If any of the MAPS members could help in giving directions to collecting sites adjacent to our direction of travel it would certainly be gratefully appreciated. Also, any guidance to campsites and/or motels would be equally helpful.

Types of collecting material we are interested in are vertebrate material, Baculites and other ammonites, crinoids, trilobites, etc.

I look forward to hear from any of the MAPS members.

(Dr. Hamell did not mention how many would be party to this trip.)

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LARRY OSTERBERGER HONORED BY FOSSIL FINDS

by Carol Wehr in THE TULLY Park Forest Earth Science Club, February 1984

...Larry Osterberger has been honored in the naming of two new fossil insects from the Mazon Creek, Illinois area. Larryia osterbergi

and Adolarryyia bairdi are described in the Canadian Journal of Zoology #61: pp. 1670-1687 (1983). The species name bairdi was named for Dr. G. C. Baird formerly of the Field Museum of Natural History, now of New York...

These extinct fossil insects of the Order Paleodictyoptera are preserved in the iron-stone concretions found in the spoil banks from the coal strip mines. They inhabited a humid tropical forest during the Upper Carboniferous period about 300 million years ago.

The specimens are described as having three pairs of wings adapted for effortless gliding. A long sucking beak has additional mouth parts that may have stabilized the beak during feeding. Apparently some species fed on the fruit of the Cordaitales and Lycopodiales trees, as evidenced by the presence of spores in the gut of one of Osterberger's specimens.

Adolarryyia bairdi (a nymph form) fore wing measures 24mm in length and 8mm in width. the hind wing of Larryia osterbergi (sub adult) is 76mm x 27mm.

Also described in the publication are 3 more new genus and species. Mazothairos enormis is the largest known specimen. From the thorax it is judged to have had a wind span of 56 cm--a giant. The hind wing of a Mazonopterum wolfforum measured 173mm x 47mm. The Turneropterum turneri specimens described have three pairs of wings preserved, measuring 13mm, 53mm and 31mm in length.

The significance of these newly described fossil insects and their relation to modern insects are discussed at length in the paper.

REFERENCE: Kukalova-Peck, J., and E. S. Richardson, Jr. New Homiopteridae (Insecta Paleodictyoptera) with wind articulation from Upper Carboniferous strata of Mazon Creek, Illinois, Canadian Journal of Zoology #61: pp 1670-1687.

Additional Sources of information: Carpenter, F. M., Carboniferous insects from the vicinity of Mazon Creek, Illinois, Illinois State Museum Science Paper, #3 (1): pp 1-20.. and Nitecki, M. H., 1979, Mazon Creek Fossils, Academic Press, NY, pp 1-565.

CONTRIBUTIONS FROM DON GOOD

I just discovered something I'd like to share with others viz the DIGEST. While watching a TV commercial about denture cleaners I got the idea that that might work on stains on fossils as well as dentures. So . . .I spent \$2.00 for 40 tablets of super strength Polident Denture Cleaners. It's FANTASTIC.

One tablet will clean about a dozen Burlington crinoid heads in 10 minutes. No more soapy water tooth brush scrubbing. This new way does a much better job and has no acids, so does not hurt the fossil a bit. It's especially good on black, organic material stain and even greatly improves iron stain. Yes, it even gets down into the hard to reach cracks.

Also works great on Mazon Creek material. Small furrows in these nodules are impossible to get to with a brush.

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SUGGESTION BY DON GOOD

How about a DIGEST on the care and/or preservation of fossils.

Sounds like an excellent idea. Write giving methods of preserving, caring, gluing, cleaning protecting--whatever. When enough material arrives one complete DIGEST could be produced.

Synchronize your pens! It's a terrific idea and all the material could/would be in one spot! IDEAS UNLIMITED--can hardly wait til fall.

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A D V E R T I S I N G S E C T I O N

Ads \$3.50 per inch (6 lines). Send information and checks payable to MAPS to: Mrs. Gerry Norris, 2623 - 34th Avenue Ct., Rock Island, IL 61201 Phone 309-786-6505

Belgian collector would like to obtain U.S. vertebrate fossils, echinoids, crustaceans, insects. Send European fossils in exchange.

Richard Smith
6 Laekenveld
1810 Wemmel BELGIUM

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THE WORLD OF FOSSILS - -

IN PURSUIT OF THE ICY BRACHIOPOD
ProgenesisDr. Merrill Foster -- Copyright, 1984
Department of Geological Sciences
Bradley University
Peoria, IL 61625-9989

The Ross Sea brachiopods in many populations seem to illustrate progenesis. Progenesis is precocious (early) sexual maturation of an organism still in a morphologically juvenile stage. Much of the Ross Sea bottom contains only widely scattered hard objects amongst the mud. Most of the objects are not large enough to permit attachment of large brachiopods which would normally be the only ones sexually mature. As a result, to live and reproduce successfully in broad areas of Ross Sea, the brachiopods have had to change the timing in their development so that sexual maturity occurs at an early stage of overall morphological development when the animal is small. This change occurs in some population of species who may mature normally in other areas (i.e., Liothyrella uva, Magellania fragilis, Magellania joubini) or may occur in all populations of other species (i.e., Magellania spinosa, Amphithyris halletensis).

Surlyk (1974) has since observed a similar situation in some brachiopods in the Cretaceous chalk of Denmark. I have also observed a possibly similar situation at some localities of the Pennsylvanian Lonsdale Limestone member in Illinois. I suspect that progenesis may be common in brachiopods of all kinds where the environment is unsuitable for long lives or at least growth to large size. We may often miss it because small specimens are easily destroyed by solution or other agencies and they are often overlooked because of their size.

Quantitative Studies

I also made multivariate analyses using the computer. The rapid calculating speed of the computer allowed me to make complex evaluations of relationships among shell features and environmental factors such as depth and temperature. I also used the computer to group populations by their morphological similarity.

The first type of analysis revealed that a number of shell features were related to each other and to the environment. For example, the size of the pedicle opening, hinge plate width, and cardinal process width in the members of the family Terebratulidae are directly related to each other and all indirectly related to the water depth. I believe the reasons for this is that currents are stronger in shallow water. Therefore, brachiopods here require a firmer attachment which in turn requires a larger pedicle and

and heavier shell. The larger pedicle requires a larger opening and a larger hinge plate to attach the larger pedicle adjustor muscles. The wider cardinal process may be simply related to the generally wider hinge plate or to the larger diductor muscles required to open the heavier shell. The terebratulids and Liothyrella have a longer beak in shallower water. I believe this favors greater streamlining that is required in rapidly moving water.

The computer-assisted grouping of various populations generally agree with qualitative analyses. They do provide suggestions as to the evolution and divergence of various southern hemisphere taxa.

Paleozoogeography

The fossil and modern brachiopod evidence suggests that most of the southern hemisphere continents have been separated from one another, at least since the Early Cenozoic. A few species may have spread more widely to some islands during the Cenozoic by chance dispersal in a current system called the Westwind drift. South America does appear to have and have had some connection during the Cenozoic with Antarctica so that some species or closely related genera occur off both continents. The Pliocene or Pleistocene chilling appears to have eliminated or forced north various taxa that formerly inhabited Antarctica, New Zealand, and South America. Those taxa that survived in more northerly areas have been unable to return because of deep water barriers or continued inhospitable water temperatures. The present fauna thus consists of cold-tolerant older elements and Recent cold-tolerant immigrants such as Macandrevia. A few cold-tolerant species that evolved in the subantarctic region seem to be spreading northward, but as they do so they are moving ever deeper to maintain their optimal water temperature.

SUMMATION

I started studying living brachiopods with many questions regarding all aspects of their biology. As my studies have progressed, even more questions have come to mind. I have been able to completely answer a few questions, to get partial or tentative answers to a moderate number of questions, and, for the moment, no satisfactory answer to a large number of questions. Thus, there is much more to be learned about living brachiopods and even more to be learned about their myriad of ancestors as they evolved in multiplicity of ways via enormous numbers through hundreds of millions of years of earth history.

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(A most sincere thank you Dr. Foster. This is an extraordinary article and not only is it informative but quite fascinating. This article began in the December, 1983 vol 6, no 9 DIGEST. MAPS has a slide program on Brachiopods. The slide program in conjunction with this article would surely make several sessions of study.

In the future when articles of this nature are sent for publication in the DIGEST they will either be the special EXPO Edition or the total DIGEST for one or two issues.

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FROM CLARENCE SCHUCHMAN

Recently I was involved in a collecting "de-cathlon" than which there has been no than-whicher in my experience.

To get the picture you must visualize the California "predicament" where streams cut their way through mountainous terrain on both sides down into a central valley that extends for hundreds of miles.

Before reaching Cretaceous rocks these streams often must cut deep canyons through, sometimes volcanics, sometimes other types of rock and overburden until finally, often only in the bottom of the stream is the ammonite-bearing rock exposed.

The collector's problem is often to grope his way around precipitous cliffs, over, under, and around huge chunks of scenery that have crashed to the bottom to obstruct the stream, to peer through poison oak and rubble to see if perchance he might get a glimpse of gold - not the metal but yellow sedimentary fossil-bearing rock (it can be black as well).

As an amateur collector working closely with the University of California and the Academy of Sciences I had been "steered" into unresearched areas by paleontologists who knew the potential was there for someone persistent enough to pursue it. It was not long before brand-new exposures were turning up along with fossils before unreported.

What occasioned this "decathlon" was the discovery in "pay-dirt" of not one, but two large ammonites. Never in twenty years had two such huge ammonites appeared before our eyes.

Now, as you can well imagine, once the find has been made the problem becomes what are you going to do with it?

The two finds were in widely separated localities. In the case of the largest of the two (we estimate 600 or 700 lb. of rock--the diameter I can't estimate until the matrix is removed) we were able to get a 4 wheel drive vehicle fairly close and use a richshaw type conveyance along with pulleys and cables to get it out of the canyon.

The other was a "horse-of-a-different-color". It was down a rugged canyon $7\frac{1}{2}$ miles by trail and pick-your-way, -a good 1000 ft. elevation below the road.

The ammonite itself was a meter in diameter exclusive of some missing parts. Two of us were able to stand it up but not able to so much as move it above the high-water mark.

What to do? We naturally explored everything. Helicopters? No luck on donations. Otherwise out of the question. Only one "trail-cat" in the country and it was not available. Pack animals? Notoriously squeamish about big rocks digging their ribs as are their drivers. It finally became evident with the rainy season in the offing that back packing was the only way -- $u\frac{1}{2}$ miles upstream!

Ammonites, while they may hold together rather firmly, are notorious for having cracks that show up to disconcert you when preparing them. In this case we were happy to be able to exploit this feature. Before long we had five pieces weighing less than 100 lb. each.

15 miles is too far to cover in one day's pack with a heavy load. We had to plan a four-day over-night stint. Fortunately in late November we got a break in the weather that looked as though it would hold.

We took the four-wheel drive in case the road got slick and camped at the head of the trail. In the morning son Steve and I got together a light over-night pack with a fishing rod to fill the supply gaps and took off.

The trip down was uneventful and we arrived by mid-afternoon. We loaded the two largest pieces (over 90 lb. each) and forded them across the stream to our camp. Steve had good luck fishing and altogether we had a good night.

Next morning we loaded up sleeping bags, left as much gear as we could including the fishing rod, and headed up the canyon.

It was rough going. We got boxed in at least once on rocky slopes and before we reached the main trail I knew I was in trouble. The new pack I had bought had bars that were digging into my back under pressure of the 100 lb. plus weight and a sharp edge on the hip strap was whipsawing some tender spots.

Steve and I agreed he would go on ahead and double back when he unloaded. We would camp at whatever point I could make during the day. It turned out that, with some improvised remedies I was able to make it to within about a mile of the truck where we camped overnight.

In the morning Steve took my pack to the truck and I started back downstream. The weather had held beautifully and things were looking up with the prospect of a little lighter load for the next day.

Steve joined me at the lower camp, but some enterprising creature, probably a racoon, had made off with his creel and it was not to be found.

In prospecting some concretions across the creek I had the misfortune to have a large, sharp rock fall on my foot which immediately swelled like a balloon. Steve, in the meantime, managed to improvise some tackle and had a couple nice fish fixed for supper while I soaked my foot.

Along toward dusk the narrow slot of the canyon below us suddenly was blocked by some pretty business-like clouds. We hurriedly ditched around our beds and pulled out our 4 x 8 ground cloth which was our only rain cover.

Sure enough sometime after dark the rain came. We huddled under our ground cloth and fought rivulets of water that kept soaking parts of

our sleeping bags all night. Finally it got light enough to see, but the rain kept on. I decided to get out and pack up anyway. The wet equipment was certainly not going to make a welcome addition to our load.

My foot looked better and I laced my shoe without lacing across the swollen part. By the time we were packed the rain stopped and we were feeling better even though we had had zero sleep.

This time we avoided getting boxed in among the rocks and things looked brighter. The sun came out occasionally, but the wind was cold and the trail was often slippery under foot. We made excellent time but when we arrived at the truck Steve, who had on my pack, had a brand of its framework across his back. It seems pack makers do not anticipate loads of 100 plus lb. these days.

After all that packing you might think this fossil would turn out to be a Pachydiscid. It did. -- S o r r y !

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ON THE MUSEUM TRAIL

In the Fall of 1983, my husband and I drove from Houston, Texas to California, and back by a more northerly route, visiting numerous museums along the way. Fossil Collectors around the country might like to know which museums to aim for when traveling in these areas.

Our first stop was very brief, at the Witte Museum in San Antonio, Texas, where there was a new exhibit pertaining entirely to dinosaurs. Before entering that exhibit hall, one could hear a fierce roar sounding somewhat between that of a hungry lion and an angry elephant. This was supposed to be the voice of a once-live dinosaur (and who can say it wasn't?). Inside the hall was an impressive full-size, fleshed model of a dinosaur, and a life-size painting of another on the wall. Various fossil bones and skeletons were in cases, and a continuous slide show was in one corner. In our haste, we were poor observers and made no notes, but left with a strong desire to return some day when we could really spend more time there.

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In El Paso, Texas we planned to visit the Centennial Museum on the El Paso campus of the University of Texas, but had to pass it by because of a dust storm there with winds gusting to 50 or 60 miles per hour. However, on a previous visit there some years ago, we saw many of the local fossils in that museum. Also at that time we were able to contact a paleontology professor (in the Geology Building) who kindly supplied us with directions to a fossil locality on Mount Cristo Rey so that I could add to my Cretaceous oyster collection two species found only in west Texas! (Exogyra clarki and E. whitneyi)

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In Tucson, Arizona, the Geology Building at the University of Arizona displays very few fossils, but has an excellent large collection of minerals. Difficulties in locating the building and then finding a place to park create an exciting challenge to the traveler interested in seeing these colorful minerals of Arizona.

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The Los Angeles County Museum of Natural History is in Exposition Park, 900 Exposition Blvd., right next to the Univ. of Southern California's Coliseum Stadium (so don't go there on a weekend in football season without considering traffic and parking problems). Inside the main entrance is an animated model of a Diplodocus dinosaur, moving its snaky neck and tail, and letting out an occasional Diplodocus-like roar, which is promptly answered by the animated Stegosaurus in the next hall. These animated monsters, though somewhat less than life-size, are amazingly life-like in their movements and are really great fun to see and hear!

The fossil exhibits however, are hard to find--up a well concealed back stairway. There are numerous fossil specimens displayed here, but comparing this fossil exhibit hall with the elegant and splendiferous Hall of Gems & Minerals in a new wing of the Museum, indicates which hall was well funded. (The Hall of Gems & Minerals is terrific, with magnificent specimens, slide shows, and a walk-in gem vault that will knock your eye out)! The big fossil skeletons from the famous La Brea Tar Pits were moved from this museum to the modern and handsome new Page Museum, built seven years ago on the site of the "tar" pits in Hancock Park.

The Page Museum, 5801 Wilshire Blvd., is a branch of the Los Angeles County Museum of Natural History, and is filled with skeletons of many species of Pleistocene mammals and birds. Here are the huge imperial mammoth, the mastodon, ground sloths, saber-tooth cat, dire wolf, bear, bison, camel, llama, tapir, peccary, dwarf antelope, horse, lion, giant condor and many other species. However, there is much more to be seen than bare bones. A striking large mural shows Southern California and animals of 40,000 years ago. Another handsome large mural shows the Ice Age migration of Asians and animals over the land bridge to North America. And in front of this mural is a "live" mammoth waving its trunk around!

A dual image of the saber-tooth cat shows the skeleton that turns into the whole animal and back to skeleton in a very tricky way that keeps the viewer fascinated and wondering, "How on earth do they do that?"

The La Brea Time Wall exhibit is a beautiful display of back-lighted illustrations and discussions of the Rancho La Brea animals and events, from 38,000 years ago to present. This is on the upper half of the wall. The lower half shows the major developments in man's history in that same time span, for each 2000 years.

The large Paleontology Laboratory is glassed all around so that visitors may watch work in progress there. There are also a couple of theatres we did not explore, but one of them presents the La Brea Story and is undoubtedly of interest.

The museum surrounds an attractive atrium garden which adds much to the beauty of the building. There's nothing musty or dusty about this modern museum and its artistic and imaginative displays! Outside, the visitor may view the various "tar" pits (actually asphalt) and also see the active excavation going on. A visit to the Page Museum and La Brea Tar Pits is highly recommended.

#

In San Francisco, The California Academy of Science in Golden Gate Park is a great museum to visit, and while the hall containing the fossils is not overly large, the exhibits are interesting and informative. Emphasis is on vertebrates and their evolution, but there is also a case of ammonites.

There is also a Hall of Gems & Minerals, and many other halls that are very interesting.

There are several halls of animals containing very life-like exhibits, especially the ones having sound effects.

The large aquarium is especially fascinating with a multitude of individual aquariums containing uncommonly seen creatures such as a dugong, moray eels, electric eels, and multiple specimens of the chambered nautilus. A new exhibit of a flock of penguins is especially entertaining at feeding time, and a very large tank with window permits visitors to view porpoises speeding around under water. One may also hear the communicating sounds made by these fascinating mammals.

#

Across the bay, in Berkeley, fossil lovers must be sure to visit the Museum of Paleontology on the Univ. of California campus. If you're traveling by BART (Bay Area Rapid Transit) you can ride the free shuttle bus, called Humphrey Go Bart, up to the campus and ask for the Earth Sciences Bldg. It is near the North Gate of the campus at Hearst & Euclid Avenue.

Go to the main office on the ground floor and get the free pamphlet, Guide to the Paleontology Museum, which gives the title, location, and very interesting information about each of the fossil exhibits in the halls of the building. There are three floors with 39 fossil exhibits on plants vertebrates, and invertebrates.

It is sometimes possible, by writing or phoning ahead, to arrange for a tour or for a look at some of the multitude of stored collections in the drawers and cabinets behind locked doors.

Also at the main office is available a free brochure, Trees of the Fossil Forest, containing a campus map marked with locations of trees known as "living fossils", such as the Ginkgo tree. The Univ. Calif. Botanical kGarden, nearby, has recreated a small portion of a Miocene forest.

While in the vicinity of the campus, go on up the mountain to the Lawrence Hall of Science. The view is spectacular, as it is also from the top of the Campanile on the campus. Lawrence Hall is a research center that "develops innovative curriculum for teaching science to students of all ages". Adults have just as much fun as kids with all the "hands-on" exhibits and activities. There is

one fossil exhibit of Tertiary plants, but mostly this is a fun place to play with science. There is also a planetarium here.

#

On our way back to Texas, we visited the Museum of Northern Arizona at Flagstaff, (in the vicinity of Petrified Forest and Grand Canyon) which exhibits "the natural and cultural history of the Colorado Plateau".

Dr. Edwin H. Colbert, who wrote all those popular books on dinosaurs, and who formerly was Curator at the American Museum of Natural History in New York, is now Curator of Vertebrate Paleontology at this Northern Arizona museum and continues his research while recovering and restoring dinosaur remains found in the area. Some of these remains may be seen in the interesting and informative exhibits in a Geology hall which emphasizes the stratigraphy and paleontology of Northern Arizona and the Four Corners area. In one corner of the hall is a small glassed-in room labeled "Fossil Preparation" which looked interesting but was not staffed at the time of our visit.

Opening off of this hall is another room which is entitled, "What in the World!", which is fun to visit. At the entrance, the visitor picks up a pencil and quiz sheet with 39 questions pertaining to 16 exhibits which are predominantly geological. After viewing an exhibit, the visitor marks his choice of answers on the quiz sheet, then uncovers the correct answer under the exhibit label, to see if he guessed right. If his total score is 13 or less, the quiz sheet says, "Quick, sign up for Museum classes"!

Other halls in this museum emphasize archeology and anthropology, showing "prehistoric, historic and contemporary cultures of the region". Popular special exhibits in July are the annual Hopi and Navajo shows, featuring their arts and crafts.

#

In Texas, the Fort Worth Museum of Science and History has a lot of exhibits in a geology hall, half of which are devoted to rocks, minerals, and general geology, and the other half to fossils. The exhibits are very educational with a great deal of information presented.

In the fossil display area, the centerpiece is an exciting action scene of a life-size

carnivorous dinosaur skeleton overcoming an herbivorous dinosaur skeleton. Although these are casts rather than fossil bones, the exhibit is no less effective.

The fossil exhibits are quite general in nature, except for one on fossils of North Central Texas which has a few common fossils of this area. The rest of the exhibits touch upon fossil formation and preservation, radioactive dating methods, and a few fossils of each of the three eras with their common names.

One exhibit of special interest shows a generalized geologic map of Texas, and a display of fossils, pseudofossils, and recent specimens grouped under the headings of Reptiles, Mammals, Ocean Life, and Plants, otherwise unlabeled. Below these are 10 question plates which may be lifted up to reveal the answers underneath. A separate list nearby names the specimens. It's always fun to test one's knowledge of fossils!

#

At Waco, Texas, there is a nifty little museum (Strecker Museum) in the basement of the Science Building at Baylor University, where one may find excellent exhibits pertaining to geology, paleontology, and other subjects. Here are displayed all the phyla, classes, and some subgroups of invertebrate and vertebrate fossils, using Texas fossils wherever possible. These are very well displayed and informative exhibits, and a pleasure to see.

#

The Houston Museum of Natural Science has a huge fossil skeleton of the dinosaur, Diplodocus (in a 2-story high hall), whose head looks right into the eye of the beholder on the 2nd floor. Just beyond Diplodocus on the 1st floor is a large Hall of Petroleum Science and Technology which contains a small area of fossil exhibits. Here may be seen a "beached" fossil Pleiosaur skeleton, some "touch" fossils, and a fascinating exhibit of fossils and geologic time, utilizing a slowly revolving drum and platforms.

As this turntable moves, information and illustrations of some of the past life in each period of geologic time may be seen on the drum, accompanied on the platforms by fossil specimens of the same period. Many of the fossils are the remains of some of the plants

and animals shown as in life in the illustrations. There are many fine specimens of vertebrates, invertebrates, and plant fossils in this exhibit, all labeled with both common and scientific names and localities.

The next case shows superb larger fossil specimens, also arranged chronologically. Next is an exhibit on Micropaleontology, containing an audio-visual presentation combined with an electronic display to show micro-fossils and their use in correlation. Beyond this is yet another display of excellent fossil fish, plants, and invertebrates including a beautiful large slab of six crinoid species from Crawfordsville, Indiana.

After the fossil exhibits, the visitor may enjoy seeing the rest of the Petroleum Geology Hall with its large geologic map of Texas on one wall, and another wall with the longest stratigraphic cross section of any museum in the country. There are some working geological exhibits of faults and folds, models of off-shore drilling platforms, and much more.

There is also an attractive Hall of Gems & Minerals and halls of Space Science, Texas Wildlife, Texas History, Oceanography, Chemistry, Communications, Energy, Astronomy, Medical Science, an observatory, and a Planetarium.

This, of course, is the best museum of all, because this is where I have been "working" at my hobby two or three days a week for the past ten years.

Sincerely,
Irene Offeman
Research Assistant in Geology

§ § §

THE CASE OF THE FRANK CRANES

There are 2 of them--did you know? They are BOTH from Texas. It's true! Ah, but one is from Austin and one is from Dallas. Dallas Frank Crane did NOT meet his demise in the May DIGEST--he just got moved--out of the Austin Paleontological Society and Austin Frank Crane got moved in.

And now will the real Frank Crane please stand up? No, will the real Frank Cranes please stand up?

From now on we're calling Austin Frank Crane, F. O.

Dallas Frank Crane you're still Frank.

If this doesn't convince everyone that Frank Crane did NOT meet his demise, we'll try again.

§ § §

FROM ABRICTOSAURUS TO ZIGONGOSAURUS

A NEW DINOSAUR DICTIONARY

The February 3 issue of SCIENCE carried an advertisement for the new and highly lauded volume "The New Dinosaur Dictionary". Any one who is interested may order a copy from: Citadel Press, Dept. S, 120 Enterprise Ave., Secaucus, NJ 07094. Price \$21.95 (\$19.95 plus \$2.00 UPS Delivery).

THE TULLY -- March 1984

§ § §

SHARK FOSSILS FOUND IN COLORADO

Denver (UPI)--University scientists have found the remains of six species of fossilized shark high in the Colorado Rockies, including one species never before recorded in North America.

Martin Lockley, professor of geology at the University of Colorado, Denver, said the discovery would help scientists reconstruct the history of the Rocky Mountains during the Carboniferous Period, 300 million to 350 million years ago.

Lockley said the remains--several hundred specimens of teeth and fin spines--were the oldest sharks known in Colorado. He said the remains included Lagarodus, a species not found before in North America, and two species previously unknown in Colorado.

MOLINE DISPATCH -- 6 May, 84

§ § §

This will be the last issue until late September. My most sincere thanks for all your letters of reinforcement. Without you it's hard to imagine producing the DIGEST. You are most generous with your contributions!

Have a safe summer! Meet lots of your friends while collecting those treasures from ancient seas.

See you right here in September.

PLEASE UPDATE THE FOLLOWING IN YOUR MEMBERSHIP DIRECTORY:

- DAVID P. BRADBURY, California Phone -- 213-388-9187
- SOUTHERN CALIFORNIA PALEONTOLOGY SOCIETY (Paleo. Societies List) Direct inquiries to: June Maxwell, Editor
3510 E. Hillhaven Drive
West Covina, CA 91791
213-332-8649
- JOHN J. CHIMENT Boyce Thompson Institute for Plant Research
Cornell University
Tower Road
Ithaca, NY 14853
- CRAIG BUNTING Apt. B 1229 W. Main St., Peoria, IL 61606
- H. (ROCKY) BYROM (note last name) 7600 SW Military Drive #103, San Antonio, TX 78227
512-675-0174
- WILLIAM DEL PRETE, Massachusetts 72 Clark St., Framingham, MA 01701
- MICHAEL ELDREDGE, North Carolina Module--add "Interested in invertebrates"
- JAMES GALVIN, Illinois Mr. & Mrs. James Galvin, 8923 Sycamore Dr.,
Hickory Hills, IL 60457
- MIRIAM KAMENZ, Illinois
- JACK GARVIN 321 N. Golden Mall, Burbank, CA 91502
- MARIE HAALA, Iowa 1538 S. Bluff, Clinton, IA 52732 --phone 319-242-3849
- GENE HARTSTEIN, Delaware Module: Chemical Engineer -- Marketing. Will trade.
Collecting since 1968. Interested in Shark
Teeth, Ammonites, Echinoids, Vertebrates,
and Atlantic Coastal plain.
- GEORGE HESLEP, Florida 5688 N. Fenger, Fresno, CA 93704
- DAVID LETASI, Michigan 41 W. Garfield Avenue, Holiday, FL 33590--813-934-0730
- JAMES F. MILLER, Missouri Geosciences Dept., Box 87, S.W. Missouri State University
Springfield, MO 65804 - 0089
- JUDY ONYANG, California 3302 N. Burton Avenue, Rosemead, CA 91770
- DALE ROSSOW, Minnesota Route 2, Box 231, Dexter, MN 55926
- PLEASE ADD THE FOLLOWING NEW MEMBERS TO YOUR MEMBERSHIP LIST
- BRUCE & RUTH BANICK
3811 Schintzius Road
Eden, NY 14057
- ROBERT B. BILLMAN III Graduate Student (MS). Would like to trade but has
2318 - E Sandra Sue Dr. not collected long enough yet
Overland, MO 63114
- TOM COUGHLIN Electrician. Possibly trade. Fascinated by all fossils
6231 O'Dell from protozoans to mammals. Eager to share and increase
St. Louis, MO 63139 knowledge about fossils and sites. Also would enjoy
314-644-0162 meeting others with same interests.

SUZANNE FISCHER
304 Far Hills Dr.
E. Peoria, IL 61611
309-694-7459

DR. T. J. FREST
1002 Lakeside Apts.
Iowa City, IA 52440

FRANK & RAELEE FRAZIER
6280 E. 39th Avenue
Denver, CO 80207

ROBERT HOFFMAN
11663 Parkwood Dr.
Marilla, NY 14102

LENITA KEYS
8003 Benaroya Lane, Apt. F-6
Huntsville, AL 35802

KELLY KOYA
1404 - 28th St. S.E.
Cedar Rapids, IA 52403
319-363-5347

BOB HARRIS
309 Indian Lookout
Iowa City, IA 52240
319-354-7698

BLANE D. PHILLIPS
2758 J St. S.W.
Cedar Rapids, IA 52404
319-363-2914

DR. RICHARD A. ROBISON
Department of Geology
University of Kansas
Lawrence, KS 66045
913-864-3338

REBECCA E. ROBERTS
20602 E. Truman Rd.
Independence, MO 64050
816-796-3917

DANIEL VENTO
22965 Esther Avenue
North Olmsted, OH 44070
216-734-5279

SUSAN M. WAGNER
265A Stony Hill Road
Eatontown, NJ 07724
201-542-7094

Student. Will trade. Interested in Echinoderms and trilobites. Collecting 1 year. Wants to learn more about fossils and increase collection.

Medical Technician. Interested in Paleozoic invertebrates. Wants to meet other collectors and learn more about paleontology.

Retired Machinist. Will trade. Major interest trilobites and agates. Has material from local area for trade. (Ed. comment--means Paleozoic)

Professor of Paleontology. Will not trade. Major interest Cambrian fossils, particularly trilobites. Interested in the promotion of paleontology

Housewife and Mother. Will not trade at the present time. Interested in all fossils.

Aerospace Engineer. Will trade. Major interest Ammonites, Cephalopods, Trilobites. Has for trade a few ammonites, cephalopods, Macrocrinus crinoid a few small items. Wants to make contacts with collectors.

Supply Clerk (US Army) and History Student. Will not trade presently. Major interest Shark Teeth. Wants contact with other collectors, share digs and knowledge.

ABOUT MAPS AREA GROUP MEMBERSHIPS

The formation of area Chapters and/or Affiliates of MAPS are encouraged.

In addition to individual memberships two types of group membership are available in MAPS 1) Chapters 2) Affiliates. The two types of group membership are compared below. Groups may be composed of a strictly fossil club or the paleontology section within an established rock club.

MAPS Executive Board, Chapters, and Affiliates each casting one vote will determine the date and site of the Fall Show, MAPS second club sponsored all-fossil-get-together.

MAPS Executive Board will determine the site and date of the EXPO.

CHAPTER

Each member of a Chapter is a full member of MAPS with all rights and privileges of individual membership.

At least two (2) contact persons will be listed in the Membership Directory one of whom shall be a liaison officer.

Each members will pay regular MAPS individual dues. No group dues are payable to MAPS

Meeting time, location, and special activities will be listed in the Membership Directory which is assembled early in February and issued at EXPO.

Scientific activities that are received early enough to be included in the DIGEST will be published.

Each member will receive a copy of the DIGEST and a copy of the Membership Directory.

AFFILIATE

Members of Affiliated groups are not necessarily MAPS members. (To be a full member of MAPS an individual must join MAPS.)

At least two (2) contact persons will be listed in the Membership Directory one of whom shall be a liaison officer.

An annual group dues will be paid. Individual membership in MAPS is NOT required of affiliate members.

Meeting time, location, and special activities will be listed in the Membership Directory which is assembled early in February and issued at EXPO.

Scientific activities that are received early enough to be included in the DIGEST will be published.

One copy of each issue of the DIGEST and one copy of the Membership Directory will be sent to a designated member of the Affiliate group.

Affiliate dues will be \$10.00 annually (but may be changed in the future to reflect costs of postage and/or the DIGEST.)

Respectfully submitted
MAPS Liaison Officer

Gilbert Norris
2623 34th Avenue Court
Rock Island, IL 61201

309-786-6505

DAVID WILBORN
41321 Larwood Dr.
Scio, OR 97374

PHILLIS WILCKEN
1992 South, 200 East
Bldg. B, Apt. B 402
Salt Lake City, UT 84115

CHRIS J. YEE
20 A Goldsmith Street
Hamilton, Victoria 3300
CANADA
055-72 3768

MICHEL AMBROISE
6, Place J-B Corot
Pezenag 34120 FRANCE
(67) 98-87-71

Stock & Station Agent. Will trade. Major interest Echinoids, Echinoderms, Shark Teeth, Gastropods. Has Middle Miocene Gastropods & Pelecypods from Hamilton Silurian - Devonian Echinoderms. General Australian fossils. Enjoys collecting and swapping.

Will trade. Major interest Echinoids and Ammonites. Has Echinoids - Ammonites - Mollusk Wants contact with persons only interested in fossils especially in echinoids.

.....

Please Add the Following:

Richard D. Hamell Rochester, NY 14623 - 5780

Dr. Werner Maidorn
56 Rue des Genets
Bridel, Luxembourg L-8131
LXBG 33064P

Economist-translator in International Bank. Will trade. Collecting 32 years. Interested in Echinoids. For trade Jurassic Cretaceous and Tertiary sea urchins. Wants to establish contact with collectors in U. S.

 X X X X

EXPO VI, 1984

368 Registered

23 New Members

 X X X X

AUSTIN PALEONTOLOGICAL SOCIETY, Austin, Texas--April, 1984

Area Code 512 - Unless otherwise noted

* Denotes MAPS member

- Bettie & Don Allen
8310 Roan Lane
Austin, TX 78736
288-3163
Interested in invertebrates. Enjoys collecting.
- Ann Bauer
Rt. 2, Box 77 H
Manor, TX 78653
272-5619
Interested in learning more about fossils. Recent collector.
- *Carlos Bazan
310 Tammworth
San Antonio, TX 78213
366-2377
Especially interested in Echinoids and trilobites. Will trade.
- *Don Bissett
3925 Dust Commander
Hamilton, OH 45011
513-863-7471
Interested in all fossils, Collecting 4 years. Will trade.
- Erma Britton
2212 Stewart Drive
Waco, TX 67608
817-755-6960
Interested in invertebrate fossils. Enjoys going to shows, exhibiting.
- *H. "Rocky" Byrom
7600 SW Military Drive #103
San Antonio, TX 78227
675-0174
Rock collector for 42 years. Rock Hound with casual interest in fossils.
- Hugh Colley
5613 Bull Creek Rd.
Austin, TX 78756
459-5813
Retired. Lon time collector in Central Texas.
- *Joan & Franklin Crane
1603 Twilight Ridge
Austin, TX 78746
327-4005
Interested in invertebrates - ammonites. Fossil fish and plants. Exhibits competitively. Will trade.
- Arthur Crane
6912 ESC
Box 643
APO, NY, NY 09611
Presently stationed in Germany
- Leslie Cohen
3415 Foothill Terrace
Austin, TX 78731
459-7095
Interested in collecting fossils, sharing information with students.
- Heather Crane
197 Willow Street
Vandenberg AFB, CA 93437

Jim & Margie Ferguson 4852 Ashbrook Dallas, TX 75221 214-388-0840	Invertebrate collectors. Will trade/sell.
*Dayle Goldenberg 1701 St. Albans Austin, TX 78745 447-4859	Interested in all fossils. Collecting for several years.
Marvin Guettler P. O. Box 372 Agua Dulce, TX 78330	Telephone Company employee - collects wherever he travels.
*Ernest & Onsbys Hammons Rt. 1, Box 43 Petersburg, TX 37144 615-659-9021	Collecting 21 years. Retired. Interested in invertebrates and wood. Will trade. Wants to learn more about identification.
R. C. & Elsie Harmon 11811 Broad Oaks Austin, TX 78759 258-5819	Active in archaeology organization.
*Les Harris 966 Murphy Rd. Sarnia, Ontario CANADA N7S 2Y2	Retired. Has collected for many years. Will trade.
Linda & George Henry 504 Hickory Ridge Rd. Manchaca, TX 78652 282-5701	Linda has collected for a number of years. Interested in invertebrates.
*A. R. & Lucille Hutchinson 931 El Dorado Way Sacramento, CA 95819-3507 916-455-8633	Interested in all fossils. Collecting 22 years. Will trade
Dr. E. C. Jonas Rt. 1, Box 117 Manchaca, TX 78652 282-1978	University of Texas Geology Professor.
Scott Kelley 11005 Alhambra Austin, TX 78759 345-6076	U of T Geology student. Interested in all fossils - especially crinoids.
Jim & Shirley Knight 127 Skyline Spur Georgetown, TX 78626 863-6226	Accredited AFMS fossil judges. Have collected extensively. Interested in microfossils, minerals.
Dee Latsha, Robert & Dal 2811 Sissinghurst Austin, TX 78745 441-2865	Interested in invertebrates.

Al Luckenbach 2412 Via Bonita Carrollton, TX 75006	
*Bob McDonald 1107 Arcadia Austin, TX 78757	Interested in all fossils - collecting.
Jack H. McLellan 4404 Travis Country Circle, No. K-2 Austin, TX 78735 892-0894	Interested in Neocene sharks & bony fishes. Cretaceous & Tertiary invertebrates.
James Merrett 5118 W. Amherst Dallas, TX 75209 214-358-3073	
Alberta Miller 1903 McCall Road Austin, TX 78703 472-1045	Interested in all phases - mainly invertebrates. Interested in field trips.
John & Mary Moody 1020 W. Morton Denison, TX 75020	Retired. Has collected for a number of years and has extensive collection. Will trade.
Michael G. Murphy 2228 East 46th Street Odessa, TX 79762 915-362-4599	Invertebrate fauna from Paleozoic & Cretaceous from world wide sources. Interested in field trips. Will trade.
*Gilbert H. Morris 2623 34th Avenue Ct. Rock Island, IL 61201 309-786-6505	Interested in invertebrates, plants. Will trade.
*Don & Hollis O'Neill P. O. Box 15977 Austin, TX 78761 251-2848	Collecting 23 years. Will trade. Interested in vertebrate, invertebrate, plants.
Mary O'Neill Karl Disher 9510 Quail Court Austin, TX 78758 837-7820	Collecting for 6 years. Interested in invertebrates, particularly trilobites. Exhibits competitively.
*Irene D. Offeman 5306 Pine Forest Rd. Houston, TX 77056 713-622-8489	Collecting 17 years. Houston Museum of Natural Science. Interested in invertebrates, studying Texas Cretaceous pelecypods. Likes Paleozoic fossils best.
John Oman 8028 Gessner #2502 Austin, TX 78753	Interested in collecting invertebrates, field trips.
Patricia Orlosky 8453 Antero Austin, TX 78749 345-3083	"I never met a rock I didn't like." Interested in learning more about paleontology, field trips.

- *Robert Price
c/o Velma Bauer
820 Reverchon Dr.
Dallas, TX 75211
- Collected extensively in Dallas area. Has extensive collection. Will trade.
- *William F. Ray
10 Tamwood Circle
Simpsonville, SC 29681
803-967-4524
- Interested in invertebrates - mainly Ammonoids & Corals. Will trade East Coast fossils for Texas fossils.
- *W. Lloyd Rose
Rt. 1, #455 E. Wayah Valley
Franklin, NC 28734
704-369-8076
- Collecting 18 years. Q. A. Engineer. Will trade. Interested in all fossils & minerals.
- John R. Schulz
P. O. Box 312
Rogers, TX 76569
817-642-3596
- Interested in all fossils - would like to learn more about fossils.
- *Dr. James Sprinkle & Gloria
5405 Chevy Circle
Austin, TX 78723
926-7748
- University of Texas Dept. of Geology Professor. Recognized Echinoderm Authority. Has collected extensively. Published numerous papers.
- *Bill & Connie Timm
922 Wedgewood Way
Richardson, TX 75080
214-697-1218
- Interested in all fossils, exhibiting, will swap.
- Gary L. Trommer
8453 Antero
Austin, TX 78759
345-3083
- Interested in all fossils, field trips.
- *Virginia & Emmette Wallace
105 E. Victory
Temple, TX 76501
817-778-8122
- Retired educators. Interested in all phases of gem & mineral hobby. Will trade. Travel extensively. Attend many shows.
- Jean Whiteley
1807 West 39th Street
Austin, TX 78731
452-4873 -- 836 - 1010
- Secretary. Collecting 6 years. Invertebrates - ammonites. Enjoys showing in competition.
- Dr. John Wilson
4452 Eck Lane
Austin, TX 78734
- Retired University of Texas professor. Still active in research. Recognized vertebrate authority.
- Dr. Keith Young
U T Geology Department
University Station
Austin, TX 78712
- University of Texas Department of Geology Professor
- "B" & Francis Zimmer
11804 Whitewing
Austin, TX 78753
836-0423
- "B" enjoys collecting all fossils. Francis University of Texas Geology student. Has collected for a number of years.

FOSSILMANIA 1984

If reservations are received prior to October 1, you will receive FREE information on COLLECTING SITES in Texas. This same information will be for SALE at FOSSILMANIA. Get your reservations in early -- you get a bonus!!

FOSSILMANIA 84 will be held at Oakdale Park, Glen Rose, Texas. The best way to reach Oakdale Park is Highway 67 to the center of Glen Rose and turn south on Highway 144 for a short distance.

HOURS: Friday, October 26th 1:00 pm to 6:00 pm
Saturday, October 27th 9:00 am to 6:00 pm
Sunday, October 28th 9:00 am to 3:00 pm

LODGING: Trailer Sites \$10.00/night (full hook-up)
Tent Sites 7.50/night
Cottages 22.00/night (1-double bed/linens furnished)
28.00/night (2-double beds/linens furnished)
30.00/night (3-double beds/no linens/
has kitchen facility)

MEALS: Some light meals will be available. There will be a real Texas BBQ on Saturday night at 6:30 pm. Cost is \$7.00/person.

DISPLAYS: Please let us know if you intend to bring a display. Tables for displays will be provided free. Let us know dimensions of table space needed and any electrical requirements.

TABLES: Tables will be assigned on a first come, first served basis. The cost is \$8.00 for a 6-foot table for the entire weekend.

FIELD TRIPS: We will have information for field trips in the local area, but no field trips will be sponsored during the show.

AUCTION: We would like a donation of one nice fossil specimen for the live auction to be held Saturday night after dinner. Please provide full data on the fossil and the name of the donor.

RESERVATIONS: Everyone should make advance reservations as soon as possible, but no later than September 30th, 1984. Please separate the registration form below and send to Frank Crane, 1603 Twilight Ridge, Austin, TX 78746. You may also call (after 5:30 pm) (512) 327-4005 for additional information or questions.

SECURITY WILL BE PROVIDED - BUT WE CANNOT BE RESPONSIBLE FOR LOST OR STOLEN ITEMS.

Please complete the form below and enclose a check payable to the Austin Paleontological Society, and mail to Frank Crane, 1603 Twilight Ridge, Austin, TX 78746, prior to September 30, 1984.

NAME: _____ PHONE: () _____
ADDRESS: _____ CITY: _____ STATE: _____ ZIP: _____

COTTAGES: 1 double bed @ \$22/night/linens furnished _____
2 double beds @ 28/night/linens furnished _____
3 double beds @ \$30/night/no linens/with _____
kitchen facilities _____

CAMPSITES: Trailer site @ \$10/night _____
Tent site @ \$7.50/night _____

TEXAS BBQ: @ \$7.00/each _____

TABLES: 30" X 72" @ \$8.00/each _____

EXHIBITS: Do you plan on bringing an exhibit?: Yes _____ No _____
Size of exhibit: _____
Electricity required: Yes _____ No _____

TOTAL ENCLOSED _____

NO ALCHOLIC BEVERAGES ARE ALLOWED ON OAKDALE PARK

The Mid-America Paleontology Society (MAPS) was formed to promote popular interest in the subject of paleontology, to encourage the proper collecting, study, preparation, and display of fossil material; and to assist other individuals, groups and institutions interested in the various aspects of paleontology. It is a non-profit society incorporated under the laws of the State of Iowa.

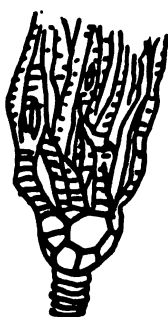
Membership in MAPS is open to anyone, anywhere who is sincerely interested in fossils and the aims of the Society.

Membership fee: January 1 through December 31 is \$7.00 per household.

MAPS meetings are held on the 1st Saturday of each month (2nd Saturday if inclement weather). September, October, May, June and July meetings are scheduled field trips. The August meeting is in conjunction with the Bedford, Indiana Swap. November through April meetings are scheduled for 2 p.m. in the Science Building, Augustana College, Rock Island, Illinois. One annual International Fossil Exposition is held in the Spring.

MAPS official publication, MAPS DIGEST, is published 9 months of the year--October through June.

President: Peggy Wallace, 590 So. Grandview, Dubuque, IA 52001
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CYATHOCRINITES

FIRST CLASS MAIL

MID-AMERICA PALEONTOLOGY SOCIETY

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Dated Material - Meeting Notice